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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/442,416	12/01/1999	AKIHIRO ICHIGE	2185-0382P	5804

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EXAMINER

NAKARANI, DHIRAJLAL S

ART UNIT	PAPER NUMBER
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1773

DATE MAILED: 09/11/2003

15

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/442,416

Applicant(s)

ICHIGE ET AL.

Examiner

D. S. Nakarani

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 03 July 2003.
- 2a) ☒ This action is FINAL. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-3, 7-10 and 13-16 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-3, 7-10 and 13-16 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ 6) ☐ Other: _____

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DETAILED ACTION

1. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.
2. Claims 1-3, 7-10 and 13-16 stand rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the enablement requirement. The claim(s) contains subject matter, which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention. For the reasons of record set forth in paragraph 2 of the Office action mailed May 29, 2002 (Paper No. 5).
3. Claims 1-3, 7-10 and 13-16 stand rejected under 35 U.S.C. 103(a) as being unpatentable over Meilhon et al (US Patent 5,356,677) with as evidence US Patent 3,264,272 to Rees in view of Applicants' own admission (page 2, lines 17-28) for the reasons of record set forth in paragraph 5 of the Office Action mailed January 3, 2003 (Paper No. 13). Further, applicants are requested to NOTE that the subject matters of US Patent No. 3,264,272 to Rees are expressly incorporated by reference in U. S. Patent 5,356,677 (Col. 4, lines 3-6 of US Patent 5,356,677). Therefore the ionic copolymers of Meilhon include all ionomers disclosed in US Patent 3,264,272.

The examiner interpret "a copolymer of ethylene with vinyl acetate," "a copolymer of ethylene with an acrylic acid ester" and "a copolymer of ethylene with a methacrylic acid ester" as an open language and inclusive of additional monomer's not recited in the claim based on

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definition of ethylene based resin given in the instant disclosure (see from page 8, line 14 to page 9, line 16).

Based on this interpretation Meilhon et al's ionic copolymer includes mono ethylenically unsaturated monomer compound such as vinyl acetate, styrene, (meth) acrylic derivatives such as methyl acrylate, ethylacrylate (column 4, lines 20-35). Meilhon et al's ionic copolymer also includes ionic copolymer of US Patent 3,264,272 which ionic copolymer derived from copolymers ethylene/acrylic acid/methyl methacrylate copolymers, ethylene/methacrylate acid/vinyl acetate copolymers (see column 3, line 58 to column 4, line 16 of US Patent 3,264,272).

4. Applicant's arguments filed July 3, 2003 have been fully considered but they are not persuasive.

In reference to rejection of claims under 35 USC § 112, first paragraph, applicants have incorporated arguments by reference submitted in the reply mailed on August 29, 2001. Further, applicants mainly argue that the materials of the outer layers are limited to a propylene-based resin and the inner layer is limited to specific ethylene based resin. The melting temperatures of these materials are within the specific range described in the claims. Page 15, lines 17-20 of the specification describes that the orientation temperature in the uniaxial orientation is preferably from about 90 to 140⁰ C. This temperature range substantially corresponds to a range higher than the melting temperatures of propylene based resins. This orientation temperature is the key to the advantages obtained by the present invention.

These arguments are unpersuasive because as per Examples of instant disclosure orientation temperature is well below the melting temperature of the propylene based resin and

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not above the melting point of propylene based resin as stated. The invention as claimed does not describe the specific range of melting temperatures of claimed material. The disclosure does not describe melting temperature range of ethylene-based resins and of propylene based resin (see page 8, line 14 to page 10, line 27). Furthermore, the disclosure as filed, does not state anywhere that the orientation temperature has to be higher than the melting point of any specific layer forming material of the multi-layer film.

In reference to rejection of claims under 35 USC § 103(a) as being unpatentable over Meilhon et al (US Patent 5,356,677) in view of applicants' own admission (page 2, line 17-28), applicants mainly argue that Meilhon et al fail to disclose or suggest that the film is a combination of the outer layers composed of a propylene based resin and an inner layer that is composed of specific ethylene based resin. Meilhon et al's multilayer film comprises at least one layer of olefin polymer and at least one layer of ionic copolymer.

These arguments are unpersuasive because Meilhon et al's olefin polymer includes polymers and copolymers of ethylene and of propylene such as polyethylene, polypropylene etc. (column 4, lines 26-35). Meilhon et al's ionic copolymer meets the definition of term "ethylene based resin defined in the present disclosure (see page 8, line 14 to page 9, line 16). If applicants are desirous to exclude ionic copolymers of Meilhon et al, "a copolymer of ethylene with vinyl acetate," "a copolymer of ethylene with an acrylic acid ester" and "a copolymer of ethylene with a methacrylic acid ester" should be either excluded or changed to closed language ethylene-vinyl acetate copolymer", "ethylene-acrylic acid ester copolymer" and "ethylene-methacrylic acid ester copolymer".

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5. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

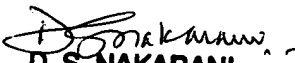
A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the mailing date of this final action.

6. Any inquiry concerning this communication from the examiner should be directed to Examiner D. S. Nakarani whose telephone number is (703) 308-2413. The examiner can generally be reached on Tuesday-Friday from 7 a.m. to 5:30 p.m..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Paul Thibodeau can be reached on (703) 308-2367. The fax phone number for the organization where this application is assigned is (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application should be directed to the receptionist whose telephone number is (703) 308-0661.

D.S. Nakarani/dh
September 9, 2003


D. S. NAKARANI
PRIMARY EXAMINER